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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,210	12/31/2003	Paul A. Puniello	20002.0365	6680

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EXAMINER

LEYSON, JOSEPH S

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 09/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/748,210

Applicant(s)

PUNIELLO ET AL.

Examiner

Joseph Leyson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 20-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 9-16 is/are rejected.
- 7) ☒ Claim(s) 2-8 and 17-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/20/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I, drawn to nozzle claims 1-19, in the reply filed on July 12, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 20-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse, as mentioned above.
3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

4. The title should be amended to reflect the restriction election, i.e., nozzle only.
5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the inner nozzle orifice and the outer nozzle orifice being substantially not coplanar, as recited by instant claim 15, must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 9 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Gellert et al. (U.S. Patent 5,935,615).

Gellert et al. (U.S. Patent 5,935,615) teach a nozzle 10 for an injection molding machine comprising a nozzle body (i.e., fig. 2, the element including collar 62 and heating element 58) having first and second passageways (portion of 78 in nozzle body; and 80) therethrough; an inner nozzle 70 having a first end and having an orifice at a second end, the inner nozzle 70 having a passageway (portion of 78 in inner nozzle 70) therethrough in fluid communication with the nozzle body first passageway (portion of 78 in nozzle body); and an outer nozzle 73 removably and fixedly coupled to the nozzle body at a first end and having an orifice at a second end, the outer nozzle 73 having a passageway therethrough in fluid communication with the nozzle body second passageway 80, the inner nozzle 70 being positioned within the outer nozzle passageway, the inner nozzle orifice and the outer nozzle orifice are substantially concentric and substantially coplanar, the inner nozzle 70 includes a wall having an inner surface and an outer surface, the inner surface defines the inner nozzle passageway, the outer surface has a plurality of radial grooves, and the radial grooves being in fluid communication with the nozzle body second passageway (i.e., figs. 1-4; col. 3, line 48, to col. 4, line 47).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gellert et al. (U.S. Patent 5,935,615) in view of Maruyama et al. (U.S. Patent 6,544,459).

Gellert et al. (U.S. Patent 5,935,615) disclose the nozzle substantially as claimed as mentioned above, except for the dimensions as recited by instant claims 10-14.

Maruyama et al. (U.S. Patent 6,544,459) discloses a nozzle for co-injection injection molding including an inner nozzle orifice and an outer nozzle orifice, wherein a ratio of a diameter of the outer nozzle orifice to a diameter of the inner nozzle orifice is approximately 1:1 (i.e., fig. 1). A gate pin 26 has a diameter of 4 mm (0.157 in) (col. 25, lines 25-26, which means that the diameter of the inner and outer nozzle orifices are both approximately 0.157 in.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the nozzle of Gellert et al. (U.S. Patent 5,935,615) with the dimensions of the inner and outer nozzle orifices of Maruyama et al. (U.S. Patent

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6,544,459) because such dimensions are known to be operable in the injection molding art as disclosed by Maruyama et al. (U.S. Patent 6,544,459). Furthermore, where the only difference between the prior art and the claims is a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device is not patentably distinct from the prior art device, In Gardner v. TEC Systems, Inc., 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984).

11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gellert et al. (U.S. Patent 5,935,615) in view of either Bemis et al. (U.S. Patent 5,891,381) or Kajikawa et al. (U.S. Patent Application Publication US 2003/0030179).

Gellert et al. (U.S. Patent 5,935,615) disclose the nozzle substantially as claimed as mentioned above, except for the inner nozzle orifice and the outer nozzle orifice being not substantially coplanar.

Bemis et al. (U.S. Patent 5,891,381: i.e., fig. 4) and Kajikawa et al. (U.S. Patent Application Publication US 2003/0030179: i.e., fig. 1) each disclose an injection molding nozzle including an inner nozzle orifice and an outer nozzle orifice which are not substantially coplanar.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the nozzle of Gellert et al. (U.S. Patent 5,935,615) such that the inner nozzle orifice and the outer nozzle orifice are not substantially coplanar because such a modification is well known and conventional in the injection molding art as disclosed by either Bemis et al. (U.S. Patent 5,891,381) or Kajikawa et al. (U.S.

Patent Application Publication US 2003/0030179) and would provide an art recognized alternative configuration for the inner and outer nozzle orifices known in the art to be operable for co-injection of materials.

Allowable Subject Matter

12. Claims 2-8 and 17-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not teach or reasonably suggest a nozzle, as recited by instant claims 2-8, particularly wherein the nozzle body further includes the counter bore defining the inner wall and the ledge, the portion of the inner wall being threaded, and the annular groove in the counter bore ledge, the annular groove being in fluid communication with the nozzle body second passageway; or a nozzle, as recited by instant claims 17-19, particularly wherein the radial grooves extend from the inner nozzle first end to the alignment diameter of the inner nozzle, the inner nozzle further includes the annular groove between the alignment diameter and the inner nozzle orifice, and the inner nozzle further includes the plurality of outer passageways providing fluid communication between the radial grooves and the inner nozzle annular groove.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gellert et al. (U.S. Patent 6,350,401), Gellert et al. (U.S. Patent

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6,274,075), Gellert et al. (U.S. Patent 6,135,751), Babin (U.S. Patent 6,030,198), Gellert et al. (U.S. Patent 5,935,616), and Gellert (U.S. Patent 5,094,603) are cited as of interest to show the state of the art.


15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Leyson whose telephone number is (571) 272-5061. The examiner can normally be reached on M-F 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gupta Yogendra can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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9/13/06